

## Firmware Update available for SNTL300P Range from FW Murphy

- **Auto Boost Your Batteries regularly to avoid battery stratification**

The SNTL300 now employs a configurable option to allow an auto-boost cycle to occur without the need to manually engage it. Should the charger not have recorded a boost cycle happening within a given period, it exercises the batteries, elevating their terminal voltage, recombining the partly separated water and strong sulphuric acid within the cells, preventing build up on the battery plates and maintaining battery life and performance

- **Prevent unnecessary Boost Periods**

The SNTL300P will terminate its Boost cycle if the output current has dropped below a preset level. This prevents needless battery gassing and temperature rise, once the battery is fully charged. Fully configurable between 0 (Disable) and 5amps, means typical standing loads can also be factored in and catered for.

- **Soft Start Feature**

To prevent large inrush currents to batteries if they are in a deep discharged condition, the SNTL300P limits it on power up and ramps the charging voltage and current levels up to their specified levels. This prevents over heating of the cells on smaller batteries when they are in a discharged condition and their internal resistance is higher.

- **Customise your Start Up Screen**

On the SNTL300P models that feature the integrated LCD option, our customers now have the option to change the start up screen on power up.

- **CANBUS J1939 Now Available**

The SNTL300P is now available with CAN functionality, with the continuous changes in the J1939 CANBUS protocol, new SPN's are now defined for the battery and battery chargers condition. The following are implemented in the CAN option of the SNTL300P charger.

**SPN Description**

167	Charging system potential
4990	Battery charger 1 state
4991	Battery charger 1 power-line state
4992	Battery charger 1 output voltage
4993	Battery charger 1 output current

Baud Rate speed is 500Kb/s

The new software suite (v1.1.13) will now enable CAN to be enabled, replacing RL4 functions.

To enable CAN on your SNTL300P unit ensure you have Manager access within the Software Suite and under [Charger Configuration](#) tab, select CAN output [Enabled](#) and [Update Charger](#)



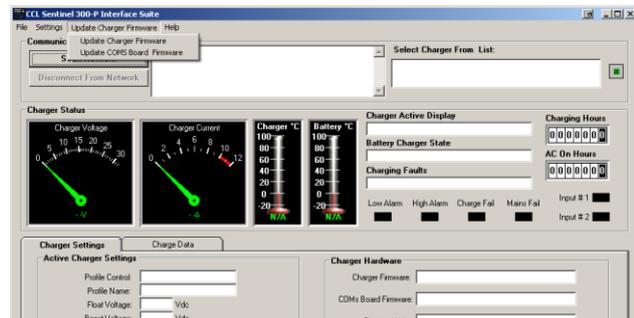
To configure your hardware for CAN, set Jumpers J5a and J5b, located just above LED's, from position 2-3 as shown to positions 1-2. CAN output is now from 12 & 13 of the IO array.

**Contact FW Murphy for details on obtaining the update and further details**

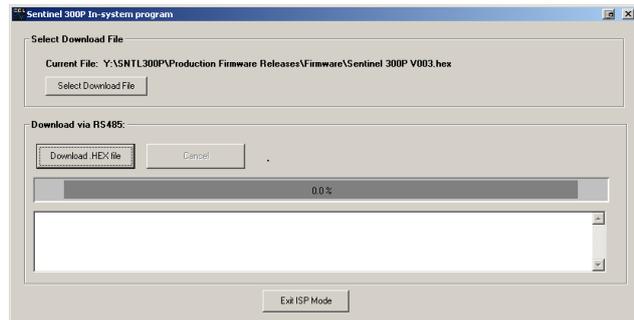
## Updating your firmware

Install the SNTL300P Interface Suite as per the instructions contained with the manual. Once installed follow standard **Connecting To Charger** section of manual to ensure charger connects correctly to software suite. Once successfully connected, select **Disconnect from Network** and follow instructions below.

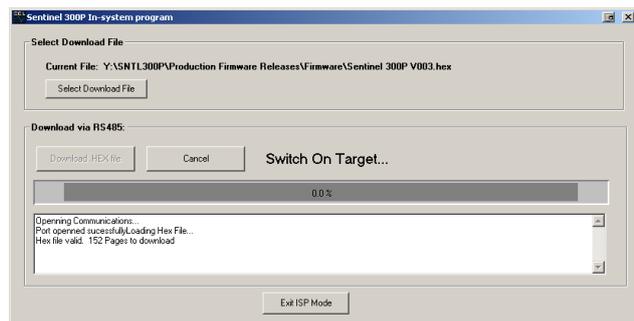
From home screen, select **update charger firmware** from Menu Bar and then select whether it is **main charger firmware** or **comms firmware** to be updated.



From the in-system programming tool select file to download using **Select Download File** Dialogue

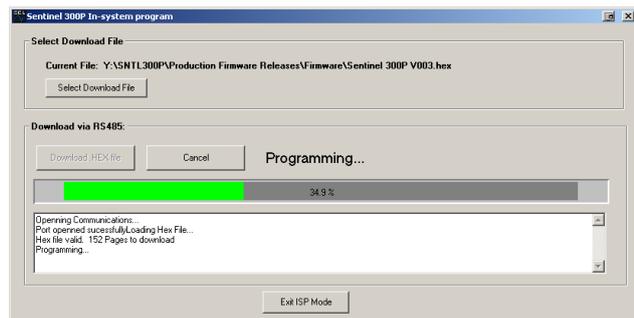


Ensure SNTL300P is not powered up, either from AC or DC power and select **Download Hex File**, follow instructions on screen to turn on charger



Whilst programming the **Charger Firmware** the LCD display, if connected, will cycle through reporting COMS FAILURE and attempts to restart until programming is completed and charger resets.

Whilst programming **COMS Firmware** the charger will cycle it's on board LED's, the LCD display will appear blank, with a rapid flashing LED during programming.



Once complete, selected **Exit ISP Mode** to return to standard Home screen and reconnect to charger.

